

STATE OF MONTANA

JOB DESCRIPTION

Montana state government is an equal opportunity employer. The State shall, upon request, provide reasonable accommodations to otherwise qualified individuals with disabilities.

Job Title: Environmental Science Specialist (Archaeologist)

Position Number: 33004

Location: Helena

Department: Transportation

Division and Bureau: Planning/Environmental Services

Section and Unit: Resources

Bureau Overview:

The Environmental Services Bureau (ESB) provides guidance to the Department to ensure statewide environmental stewardship and compliance with environmental laws, rules, regulations, policies, orders, and agreements. The ESB identifies and evaluates potential impacts of transportation construction and maintenance activities on natural, social, and economic resources and recommends measures to avoid, minimize, or mitigate such impacts in compliance with applicable local, state, federal, and tribal regulations and policies. The ESB consults with and receives approvals or permits from a variety of local, state, federal, and tribal agencies. Resources evaluated by ESB include those pertaining to fish, wildlife, vegetation, wetlands, water resources, water quality, historic, cultural, archaeological, paleontological, hazardous and solid waste, erosion and sediment control, air quality, noise, visual, social, economic, etc.

Job Overview:

This position serves as the Department's technical authority in the archaeological aspects of cultural resource management, evaluation, and regulatory compliance issues affecting major transportation projects. The position is responsible for planning and implementing comprehensive cultural resource evaluations and site investigations; managing and implementing various archaeological projects; providing advanced technical assistance and research services; administering contracts and overseeing contracted services; and performing a variety of other duties as assigned. The position reports to the Resources Section Supervisor (position 33012) and does not directly supervise other agency personnel.

Essential Functions (Major Duties or Responsibilities):

A. CULTURAL RESOURCE PROJECT MANAGEMENT

40%

This position manages various aspects of cultural investigation, evaluation and artifact recovery projects.

1. Manages and implements cultural site investigation, evaluation and artifact recovery projects to determine the location and significance of cultural resources impacted by proposed future transportation construction projects. Establishes overall project priorities, procedures, timelines, and cost estimates and monitors project progress to ensure comprehensive site evaluations. The incumbent must assess the requirements of individual projects, available resources, and Department and program goals and objectives to establish sensible priorities, estimate time and costs, and determine human and material resource requirements (e.g., travel, lodging, consultant services, etc.).
2. Prepares and monitors budgets for individual cultural site investigation, evaluation and artifact recovery projects to ensure that expenditures do not exceed allocations. This involves determining project requirements; assessing project costs (e.g., extent and costs of cultural resource inventories, evaluations, archaeological site mitigation, etc.); determining consultant costs, material expenses, etc.; tracking expenditures for each project to ensure that allocated funding is not exceeded; making budget recommendations for various program components; and forecasting expenditures based on factors such as historical expenses, proposed program initiatives, and ongoing activities.
3. Directs cultural resources activities that require extensive coordination with State Historic Preservation Office (SHPO), Tribal Historic Preservation Offices (THPO), Federal Highway Administration (FHWA), Advisory Council on Historic Preservation (ACHP), and other state and federal agencies and the general public. This involves researching SHPO files, Montana State Library files, and General Land Office Maps; presenting professional evaluations of site significance, determining effects to significant cultural resource sites; negotiating and implementing MOAs and Programmatic Agreements ; negotiating mitigation of impacts to sites with the SHPO, THPOs, and ACHP in compliance with State and Federal Laws, and representing the Department's cultural resource interests at public scoping meetings, impact evaluation meetings, interagency meetings, and internal meetings.
4. Develops methods and procedures for dealing with specific types of cultural resources potentially affected by future construction projects. This involves evaluating project site topography, determining the probability of cultural resources, establishing appropriate methods for assessing specific cultural resources, determining potential effects of construction on cultural resources, and developing recommendations and design alternatives to minimize adverse impacts.
5. Determines whether construction will affect cultural resources which are eligible for listing in the National Register of Historical Places (NRHP). This involves identifying potential cultural resources; researching maps, project plans, various historical and government documents, and requirements for registration in the NRHP; coordinating with tribal preservation officers and SHPO representatives to determine presence and location of cultural resources (e.g., tribal lands, sacred sites, etc.); and documenting the results in a written report.
6. Serves as a principal liaison between MDT and Native American Tribal Preservation Officers and other state and federal agencies (e.g., Bureau of Indian Affairs, Bureau of Reclamation, US Forest Service, National Park Service, Federal Highway Administration, Bureau of Land Management, MT Department of Natural Resources and Conservation , Department of FWP, etc.) to explain, negotiate, and defend Department positions on proposed and active transportation projects affecting cultural resources; facilitate appropriate exchange of

information regarding project plans and relevant regulations; promote cooperation and consensus between tribal authorities and MDT; and secure project approvals.

7. Establishes and maintains positive working relationships with tribal representatives to effectively exchange information regarding cultural resource issues affecting project planning and construction. Coordinates with tribal preservation officers and other tribal representatives to explain proposed project plans and parameters; receive information regarding existence of cultural resources associated with project parameters; resolve problems related to project plans, ROW, etc.; and discuss religious sensibilities, conflicting objectives, and cultural perspectives.
8. Promotes awareness and understanding of cultural resource issues within the Department and proposes options and alternatives related to project designs, timelines, and other parameters to develop consensus among involved and affected parties. Provides information to MDT design and construction staff regarding tribal representatives' concerns related to proposed project plans. Determines feasibility of projects in terms of cultural resource issues; recommends design modifications to design staff incorporating tribal and Department interests, engineering standards, and statutory requirements to ensure that cultural and religious sensitivities are taken into consideration, and that established rules and regulations are met.
9. Serves as Department's technical authority on archaeological resource issues to provide expert consultation and guidance regarding culturally sensitive areas, preservation/mitigation, and related issues throughout project design and implementation. Develops solutions and alternatives in response to unique project-specific cultural resource issues to promote project quality, cost-effectiveness, and regulatory compliance while ensuring effective cultural preservation or mitigation measures are implemented.
10. Provides on-site and remote technical expertise to other state and federal agencies, Department staff, District offices, and professional consultants involved in cultural resource aspects of MDT projects to ensure compliance with applicable cultural resource regulations and standards. This involves consulting with appropriate state, federal, and tribal resource management agencies to exchange information, identify issues and concerns, and develop recommendations for minimizing impacts to cultural resources; attending professional conferences and workshops to maintain and expand technical expertise and to be informed of changes in procedures, guidelines, laws, and regulations; and regulating MDT programs and projects to ensure compliance with established procedures, guidelines, and laws. Provides professional guidance and cultural resource advice to project planners, design engineers, and regulatory agencies regarding the continuously evolving cultural resource program and all associated laws and regulations.
11. Provides information to MDT management for review during the development of Memoranda of Agreement, Programmatic Agreements, Memoranda of Understanding, and mitigation plans in the cultural resources program.

B. PROJECT DEVELOPMENT AND RESEARCH

25%

This position performs various functions related to the development of MDT construction projects and conducts ongoing research to develop new methods of cultural resource management and maintain current knowledge of new developments and discoveries in areas of expertise.

1. Coordinates with various agencies and individuals at various government agencies (e.g., USFS, BLM, BIA, DNRC, FWP, etc.) to secure appropriate antiquities permits for fieldwork. This involves explaining and defending acceptable project-specific research designs and field

methods, determining appropriate mitigation for MDT projects impacting cultural resources, interpreting and evaluating various agencies' requirements, and writing permit applications to ensure that construction practices and mitigation are in accordance with established standards, that all processes and documentation are accurate and understood by appropriate agencies, and that permit applications accurately reflect project conditions. Negotiates conditions to obtain permission to conduct fieldwork on private property, and coordinates with researchers to obtain permits for work on MDT-administered lands.

2. Evaluates the plans, special provisions, specifications, drawings, contracts, construction manuals, and memos on MDT projects to ensure compliance with all state and federal policies and procedures regarding the management of cultural resources. Analyzes, interprets, and evaluates all documentation regarding project construction, measurements, and compensation; provides recommendations for design modifications, suitable location, cost/benefit adjustments, and appropriate compensation for contractors.
3. Designs and conducts cultural resources investigations and field evaluations to identify, record, and evaluate cultural resources located within MDT project areas and determine potential impacts of proposed construction and maintenance projects. This involves assessing the nature and scope of proposed projects, including engineering designs, materials specifications, timelines, and other factors; determining appropriate methods of analysis based on unique cultural characteristics; determining significance and boundaries of cultural resource sites; interpreting physical surroundings; performing research using a variety of government and private sources; conducting field surveys; and recording findings to ensure that all potential impacts to cultural resources are documented for assessment and analysis.
4. Determines potential impacts to cultural resource sites based on proposed engineering plans and specifications for individual projects and develops legally and scientifically defensible reports detailing the factors contributing to the potential impacts; communicates with involved parties (e.g., tribal officials, design engineers, etc.) to explain impacts; and ensures that all decisions and judgments are adequately documented. This involves analyzing, interpreting, and synthesizing detailed information and data from all plans and conclusions as well as applicable statutory requirements and other factors (e.g., bureau and division objectives, tribal concerns, administrative recommendations, etc.)
5. Develops cultural resource reports in collaboration with engineers and other highway personnel to document impacts, avoidance alternatives, and/or impact mitigation measures involved in Department projects. This involves preparing Historic Preservation plans, scopes-of-work, and projected cost estimates for projects requiring mitigation; preparing contracts for mitigating sites and/or special provisions to contract plans that require protection during highway construction; preparing detailed reports in accordance with the National Environmental Policy Act, Sections 106 and 110 of the National Historic Preservation Act, Montana Antiquities Act, Section 4(f), Montana Environmental Policy Act, and other appropriate state and federal regulations.
6. Develops, proposes, and directs site-specific research studies related to cultural resources impacted by transportation systems. This involves determining the need for special studies based upon availability or lack of current information, assessing proposed projects and site-specific resource characteristics, locating and researching various printed materials and state and national databases, analyzing and evaluating compiled data, and developing formal written reports and summary analyses.

C. CONTRACT ADMINISTRATION

25%

This position administers contracts for cultural resource professionals involved in Department projects to ensure the effective performance of contracted services.

1. Defines and assesses scope-of-work, appropriate time frames, and costs for Department projects to determine the need for contracted services within the Bureau. This involves assessing the nature and scope of projects, available human and material resources, and current and projected workflow.
2. Develops project plans and requirements for use in developing bid solicitations for professional consulting services. This involves defining project scope, timelines, procedures, work review and assessment processes, proposal evaluation criteria, cost estimates, and all other technical aspects of project.
3. Develops project-specific contract special provisions regarding archaeological and cultural resource issues relevant to project construction. Negotiates with project planners to incorporate special provisions into contracts to ensure that project planners are aware of cultural resources that may be affected by project construction.
4. Participates in the bidding and selection process to ensure the selection of qualified cultural resource consultants that meet the needs and expectations of the Department. Identifies potential bidders, directs recruitment and selection processes (e.g., RFPs, IFBs, etc.), and responds to requests for clarification as required throughout the bidding process.
5. Directs, coordinates, monitors, reviews, and approves cultural resources investigations and reports performed and submitted by professional consultants. Monitors performance by conducting quality assurance reviews of work before final submission, monitoring adherence to established methods and guidelines, and conducting scheduled reviews.
6. Monitors contractor performance by conducting periodic quality assurance reviews of work. This involves reviewing random samples of work, evaluating and supervising field operations, and scheduled reviews. This position also ensures compliance with all terms and conditions of individual contracts.
7. Oversees the payment of claims for contracted services to ensure that services were delivered in compliance with agreements, ensure timely payment and justification, and ensure proper expenditure allocations. This involves review of quality assurance checks of contract work and review of contract agreements to adjust and calculate payments (i.e., there may be a reduction in payment if work does not meet quality standards).
8. Responds to contractor inquiries regarding specific cultural resource problems or related issues and provides consultation and technical assistance to provide relevant guidelines, procedures, priorities, and other information. Coordinates or provides limited training in these areas as required to promote effective contractor performance.

D. OTHER DUTIES

10%

Performs a variety of other duties in support of ongoing Department operations and activities as assigned by Resources Section Supervisor. This includes conducting public outreach programs such as school presentations about archaeology, coordinating special research projects, attending meetings and conferences, and participating in on-going education and training as directed.

Acts as Department contact in the event that human skeletal remains are discovered within MDT right of way. When human remains are discovered works with County Coroner, SHPO, and the appropriate Indian Tribe to gather, identify, and reburial the remains, as specified under State law.

Provides recommendations to construction contractors regarding whether or not they need to hire an archaeologist to conduct cultural resource inventories of proposed contractor furnished material sources. Coordinates this effort with DEQ's Opencut Mine Permitting program.

Supervision

The number of employees supervised is: ***This is not a supervisory position***

The position number for each supervised employee is: N/A

Physical and Environmental Demands:

PHYSICAL

- Travel throughout the state up to 12,000 miles per year
- Work in proximity with heavy equipment, including front end loaders, back hoes, cranes, dump trucks, and other earth moving equipment.
- Physical activities, including lifting up to 50 pounds, traversing uneven terrain, and transporting supplies and equipment in all weather.
- Walk along existing and proposed highway corridors under extreme environmental conditions.
- Infrequent extended work hours and unusual shifts to meet deadlines.
- Read technical papers, manuals, publications and statutes, in hard copy and electronic format.
- Operate a personal computer for extended periods of time.
- Remain seated for extended periods of time, with occasional walking; standing; bending.
- Communicate clearly in technical writing, and verbally (in person and over the phone) to a wide variety of audiences of varying technical levels.

MENTAL

- Effectively manage confrontational situations related to environmental/cultural compliance.
- Manage stress from implementing complex, confusing, changing, and potentially contradictory laws, regulations, and agreement requirements.
- Investigate, analyze, and develop innovative solutions to complex and often unprecedented and/or conflicting considerations.
- Flexibility and adaptability in response to changing environmental/cultural rules, regulations, and permit/authorization conditions.
- Decision making that affects cultural resources and public perception.
- Demand for accuracy in all aspects of work.
- Meet inflexible deadlines and changing priorities.
- Manage, prioritize, and coordinate a large number of tasks simultaneously.
- Compile, compare, analyze, and interpret data/information.
- Negotiating
- Instructing and mentoring
- Deal with the public, contractors and State and federal agencies on a regular basis.

- Foster effective relationships with other MDT, regulatory agencies, and other governmental personnel.

Knowledge, Skills and Abilities (Behaviors):

The position requires extensive knowledge of the theories and concepts of cultural resource management; archaeology, anthropology, scientific documentation, and transportation project development and completion processes. The position also requires thorough knowledge of Montana prehistory; human osteology; geomorphology; stratigraphy; advanced and recently developed archaeological research methods and techniques; contract administration principles; and state and federal laws pertaining to cultural resource management, including National Historic Preservation Act, Section 106, 110, and 68, NEPA, Native American Grave Protection and Repatriation Act, American Indian Religious Freedom Act, Montana Antiquities Act, Human Skeletal Remains and Burial Site Protection Act, etc., as well as knowledge of Programmatic Agreements, Memoranda of Agreement, and principles and requirements for National Register of Historic Places eligibility.

Skills

This position requires advanced skills in negotiating viable solutions and alternatives to often conflicting engineering, cultural, and regulatory requirements. The position also requires skill in the use of standard office software applications (e.g., word processing, databases, etc.), analyzing and interpreting statistical information, and written and verbal communication and negotiation.

Abilities

The position requires the ability to develop innovative resource management approaches to unique circumstances; adapt and modify project plans according to changing site-specific characteristics and cultural issues, applicable regulations, and project requirements; exercise professional judgment to arrive at timely decisions in complicated situations in the field; translate technical data to individuals of varied technical levels; and establish and maintain effective working relationships with consultants, landowners, Department staff and managers, special interest groups, and other state and federal agencies. The incumbent must possess the ability to remain objective in controversial situations; effectively determine impacts by balancing engineering theories and practices with cultural sensibilities and regulatory requirements; prepare scientific reports; coordinate a large number of projects simultaneously; and adequately perform duties while enduring significant public exposure.

The position requires the incumbent have the ability to work long hours in the field by him or herself.

Minimum Qualifications (Education and Experience):

Education and experience required for the first day of work, including alternative methods of acquiring minimum qualifications:

A master's degree in archaeology, anthropology, or a closely related field, plus four (4) years of professional experience in archaeological research, field work, administration, or management. Transportation related experience is preferred. Alternative combinations of education and experience may be considered.

Special Requirements:

List any other special required information for this position

- | | |
|--|--|
| <input type="checkbox"/> Fingerprint check | <input checked="" type="checkbox"/> Valid driver's license |
| <input type="checkbox"/> Background check | <input type="checkbox"/> Other; Describe |
| Union Code | Safety Responsibilities |

The specific statements shown in each section of this description are not intended to be all inclusive. They represent typical elements and criteria considered necessary to perform the job successfully.

Signatures

My signature below indicates the statements in the job description are accurate and complete.

Immediate Supervisor	Title	Date
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Administrative Review	Title	Date
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My signature below indicates that I have read this job description.

Employee	Title	Date
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Human Resources Review

Job Code Title:

Job Code Number:

Pay Band:

My signature below indicates that Human Resources has reviewed this job description for completeness and has made the following determinations:

☐ FLSA Exempt

☐ FLSA Non-Exempt

☐ Telework Available

☐ Telework Not Available

☐ Classification Complete

☐ Organizational Chart attached

Human Resources:

Signature

Title

Date